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## Sheridan County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 8 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Sheridan County economy.<sup>1</sup> These 8 sectors have a total direct output of approximately \$288 million and support 381.2 jobs in Sheridan County. Running the model for all 8 sectors simultaneously produces the following results:

#### Agriculture Contribution in Sheridan County

Impact Type <sup>2</sup>	Employment	% of Total Employment	Total Value Added <sup>3</sup>	% of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	% of Gross Regional Product
Direct Effect	381.2	21%	\$88,453,357	52%	\$287,760,903	169%
Indirect Effect	178.4	10%	\$14,950,064	9%	\$27,191,931	16%
Induced Effect	89.8	5%	\$6,463,871	4%	\$11,225,725	7%
Total Effect	649.3	36%	\$109,867,292	64%	\$326,178,559	191%

As shown in the above table, agriculture, food, and food processing supports 649.3 jobs, or 36% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$326 million, roughly 191% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 8 agriculture, food, and food processing sectors is approximately \$110 million, or 64% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 64% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:  
[https://implan.com/index.php?option=com\\_content&view=category&id=19](https://implan.com/index.php?option=com_content&view=category&id=19)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 231.7 employees. This table also shows the amount of jobs that are created by the agriculture industry in Sheridan County.

#### Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	231.7	\$162,376,685
Grain farming .....	100.6	\$95,293,941
Wholesale trade.....	47.3	\$10,607,479
Truck transportation.....	31.9	\$5,488,067
All other crop farming.....	31.0	\$10,631,192
Monetary authorities and depository credit intermediation .....	29.8	\$4,992,053
Support activities for agriculture and forestry .....	21.7	\$1,204,179
Services to buildings .....	14.1	\$340,337
Animal production, except cattle and poultry and eggs.....	13.2	\$3,614,701
Maintenance and repair construction of nonresidential structures .....	8.0	\$1,331,656

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$162 million to Sheridan County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

#### Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	231.7	\$162,376,685
Grain farming .....	100.6	\$95,293,941
Oilseed farming .....	2.5	\$14,718,603
All other crop farming.....	31.0	\$10,631,192
Wholesale trade.....	47.3	\$10,607,479
Truck transportation.....	31.9	\$5,488,067
Monetary authorities and depository credit intermediation .....	29.8	\$4,992,053
Animal production, except cattle and poultry and eggs.....	13.2	\$3,614,701
Owner-occupied dwellings .....	0.0	\$3,272,929
Electric power transmission and distribution.....	1.0	\$1,353,170

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Sheridan County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models and agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.